

## 2/2-way valves DN 8 to DN 50

For neutral gases and liquid fluids

Solenoid actuated, with forced lifting

Diaphragm valves

Internal threads G 1/4 to G 2 or 1/4 NPT to 2 NPT

Operating pressure 0 to 10 / 16 bar

82540

82640

**Click-on®**

### Description (standard valve)

Solenoid valve for e. g. air, water, oil

Switching function:	normally closed
Flow direction:	determined
Fluid temperature:	-10 °C up to max. +90 °C
Ambient temperature:	-10 °C up to max. +50 °C
Mounting position:	optional, preferably solenoid vertical on top

### Material

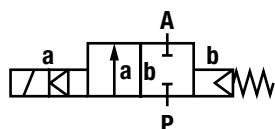
Body:	Brass (CW617N)
Seat seal:	NBR
Internal parts:	Stainless steel, PVDF, Brass

For contaminated fluids insertion of a strainer is recommended.

### Features

- High flow rate
- For robust industry solutions
- Damped operation
- Suitable for vacuum
- For systems with low or fluctuating pressure
- Valve operates without differential pressure
- Solenoid interchangeable without tools (**Click-on®**) only solenoid 915x and 940x

### Symbol



### Ordering information

To order, quote model number from table overleaf, e. g. 8254400.9151 for a DN 25 valve.



### Characteristic Data

#### Valves

Part Number Solenoid with ---	Part Number Solenoid with ~	Nominal Diameter (mm)	Connection Size	Operating Pressure *		k <sub>v</sub> -value ** (Base m <sup>3</sup> /h)	Weight Total (kg)
				min. (bar)	max. (bar)		
8254000.9151 8254000.9301 8264000.9151 8264000.9301	8254000.9154 8254000.9304 8264000.9154 8264000.9304	8	G 1/4 G 1/4 1/4 NPT 1/4 NPT	0	10 16 *** 10 16 ***	1.9	0.8
8254100.9151 8254100.9301 8264100.9151 8264100.9301	8254100.9154 8254100.9304 8264100.9154 8264100.9304	10	G 3/8 G 3/8 3/8 NPT 3/8 NPT	0	10 16 *** 10 16 ***	3.0	0.8
8254200.9151 8254200.9301 8264200.9151 8264200.9301	8254200.9154 8254200.9304 8264200.9154 8264200.9304	12	G 1/2 G 1/2 1/2 NPT 1/2 NPT	0	10 16 *** 10 16 ***	3.4	0.9
8254300.9151 8254300.9301 8264300.9151 8264300.9301	8254300.9154 8254300.9304 8264300.9154 8264300.9304	20	G 3/4 G 3/4 3/4 NPT 3/4 NPT	0	10 16 *** 10 16 ***	5.8	1.0
8254400.9151 8254400.9301 8264400.9151 8264400.9301	8254400.9154 8254400.9304 8264400.9154 8264400.9304	25	G 1 G 1 1 NPT 1 NPT	0	10 16 *** 10 16 ***	8.0	1.3
8254500.9401 8264500.9401	8254500.9404 8264500.9404	32	G 1 1/4 1 1/4 NPT	0	16 ***	23.0	4.3
8254600.9401 8264600.9401	8254600.9404 8264600.9404	40	G 1 1/2 1 1/2 NPT	0	16 ***	25.0	4.3
8254700.9401 8264700.9401	8254700.9404 8264700.9404	50	G 2 2 NPT	0	16 ***	41.0	5.4

\* for gases and liquid fluids up to 25 mm<sup>2</sup>/s (cSt)

State voltage [V] und frequency [Hz]

\*\* C<sub>v</sub>-value (US) ≈ k<sub>v</sub>-value x 1.2

\*\*\* for liquid mediums and an operating pressure > 10 bar is the maximum allowed differential pressure limited to 2 bar.

### Solenoid 9151 / 9154; 9401 / 9404; 9301 / 9304

#### Standard voltages

DC ---	AC ~ 40 Hz – 60 Hz	
	24 V	24 V
–	110 V	120 V
–	230 V	220 V

Design acc. to DIN VDE 0580

Voltage range ±10 %

100 % duty cycle

Protection class acc. to EN 60529 IP65

Socket Form A acc. to DIN EN 175301-803 (included)

AC with rectifier plug

### Power Consumption

According to DIN VDE 0580 at coil temperature +20 °C.

In operation the power consumption of the solenoid decreases by approx. 30 %.

Solenoid	DC ---	AC ~	
		Inrush	Holding
915x *	18 W	20 VA	20 VA
940x *	38 W	42 VA	42 VA
930x	18 W	20 VA	20 VA

\*  coil only

(with the exception of solenoid 94xx up to 41 V AC)

#### Attention!

The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

### Further Options (Valves)

XXXXX01.XXXX Normally open, up to G 1 (1 NPT) with solenoid 9150 max. 10 bar,  
with solenoid 8300 max. 16 bar,  
from G 1 1/4 (1 1/4 NPT) only with solenoid 8400 max. 16 bar

XXXXX02.XXXX Manual override only from G 1 1/4 (1 1/4 NPT)

XXXXX03.XXXX Seat seal FPM,  
fluid temperature –5 °C up to max. +110 °C

XXXXX14.XXXX Seat seal EPDM, for hot water,  
fluid temperature –10 °C up to max. +110 °C

XXXXX17.XXXX Normally open, seat seal FPM,  
fluid temperature –5 °C up to max. +110 °C, from G 1 1/4  
(1 1/4 NPT) only with solenoid 8400 max. 16 bar

On request Further versions

**Accessoires:** - Manual override conversion kit  
- Mounting bracket conversion kit

### Further Options (Solenoids)

XXXXXX.9356 Protection class Ⓢ II 2 GD EEx me II T3 T 140 °C

XXXXXX.8326 \* Protection class Ⓢ II 3 GD EEx nA II T4 T 135 °C

XXXXXX.8426 \* Protection class Ⓢ II 3 GD EEx nA II T4 T 135 °C

XXXXXX.8441 Protection class Ⓢ II 2 GD EEx me II T3 T 140 °C

XXXXXX.9176 \* Protection class Ⓢ II 3 GD EEx nA II T4 T 135 °C

XXXXXX.9191 Protection class Ⓢ II 2 GD EEx me II T3 T 140 °C

XXXXXX.9426 \* Protection class Ⓢ II 3 GD EEx nA II T4 T 135 °C

On request Further versions

\* DC only, for AC solenoids with design inspection certificate according to category 2,  
e. g. xxxxxxx.9191, xxxxxxx.8341 or xxxxxxx.8441

#### Note to Pressure Equipment Directive (PED):

The valves of this series, including the connection size DN 25 (G 1), are according to Art. 3 § 3 of the Pressure Equipment Directive (PED) 97/23/EG. This means interpretation and production are in accordance to engineers practice wellknown in the member countries.

The CE-sign at the valve refers not to the PED. Thus the declaration of conformity is not longer applicable for this directive.

For valves > DN 25 (G 1) Art. 3 § (1) No.1.4 applies.

The basic requirements of the Enclosure I of the PED must be fulfilled. The CE-sign at the valve includes the PED. A certificate of conformity of this directive will be available on request.

#### Note to Electromagnetic Compatibility Guideline (EEC):

The valves shall be provided with an electrical circuit which ensures the limits of the harmonised standards EN 61000-6-3 and EN 61000-6-1 are observed, and hence the requirements of the Electromagnetic Compatibility Guideline (2004/108/EG) satisfied.

### Drawings

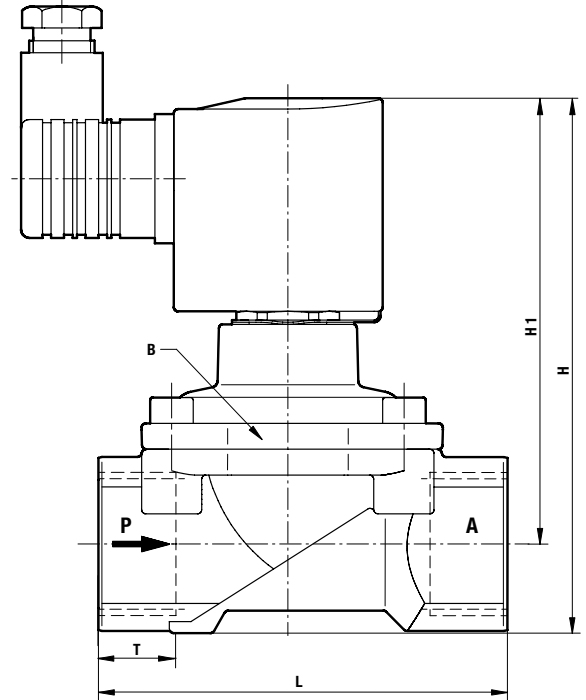
G 1/4 - G 1 with solenoid 915x (10 bar)  
 resp. 1/4 NPT - 1 NPT with solenoid 915x (10 bar)

### General Dimensions

Solenoid rotatable 360°  
 Socket turnable 4 x 90°  
 (socket included)

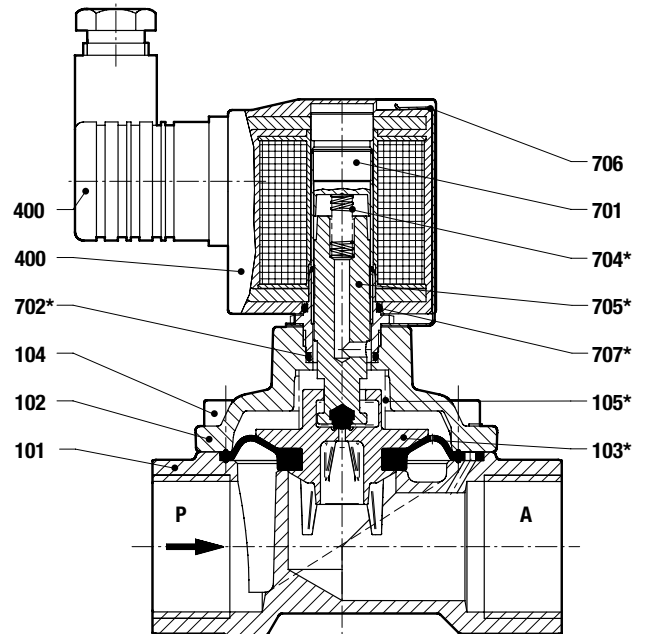
Part Number	Connection Size	L (mm)	H (mm)	H1 (mm)	B* (mm)	T (mm)
8254000.915x 8264000.915x	G 1/4 1/4 NPT	60	104	92.5	44	12.0 10.0
8254100.915x 8264100.915x	G 3/8 3/8 NPT	60	104	92.5	44	12.0 10.5
8254200.915x 8264200.915x	G 1/2 1/2 NPT	67	108	94.5	44	14.0 13.5
8254300.915x 8264300.915x	G 3/4 3/4 NPT	80	115	99.0	50	16.0 14.0
8254400.915x 8264400.915x	G 1 1 NPT	95	124	103.5	62	18.0 17.0

\* B = max. width



### Section View

- 101 Valve body
- 102 Valve cover
- \*103 Diaphragm
- 104 Allen head screw
- \*105 Pressure spring
- 400 Solenoid
- 701 Core tube
- \*702 O-ring
- 703 Round plate
- \*704 Pressure spring
- \*705 Plunger
- 706 Spring clip
- \*707 O-ring
- 1400 Electrical connector (included)



\* These individual parts form a complete wearing unit.  
 When ordering spare parts please state Cat. No. and Series No.

## Drawings

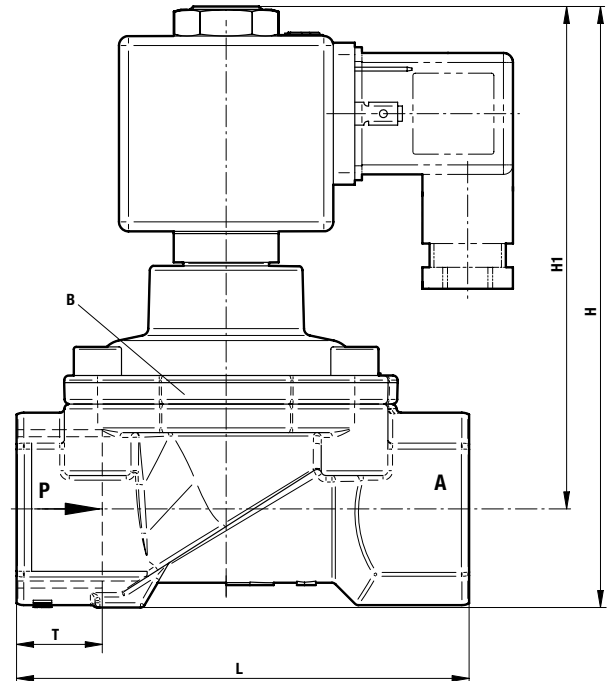
G 1/4 – G 1 with solenoid 930x (16 bar)  
 resp. 1/4 NPT – 1 NPT with solenoid 930x (16 bar)

## General Dimensions

Solenoid rotatable 360°  
 Socket turnable 4 x 90°  
 (socket included)

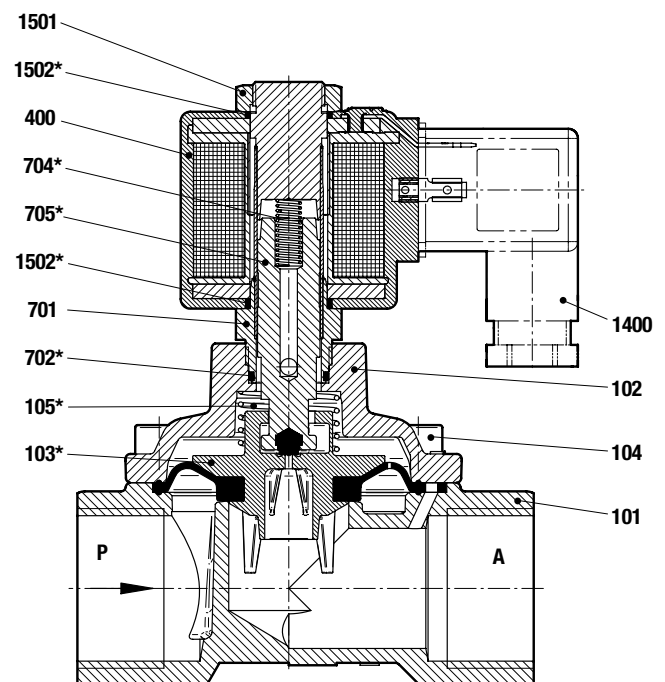
Part Number	Connection Size	L (mm)	H (mm)	H1 (mm)	B* (mm)	T (mm)
8254000.930x 8264000.930x	G 1/4 1/4 NPT	60	108	96	44	12.0 10.0
8254100.930x 8264000.930x	G 3/8 3/8 NPT	60	108	96	44	12.0 10.5
8254200.930x 8264200.930x	G 1/2 1/2 NPT	67	110	96	44	14.0 13.5
8254300.930x 8264300.930x	G 3/4 3/4 NPT	80	117	100	50	12.5 14.0
8254400.930x 8264400.930x	G 1 1 NPT	95	126	105	62	14.0 17.0

\* B = max. width



## Section View

- 101 Valve body
- 102 Valve cover
- \*103 Diaphragm assembly
- 104 Allen head screw
- \*105 Pressure spring
- 400 Solenoid
- 701 Core tube
- \*702 O-ring
- \*704 Pressure spring
- \*705 Plunger
- 1400 Electrical connector (included)
- 1501 Hexagon screw
- \*1502 O-ring (2x)



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### Drawings

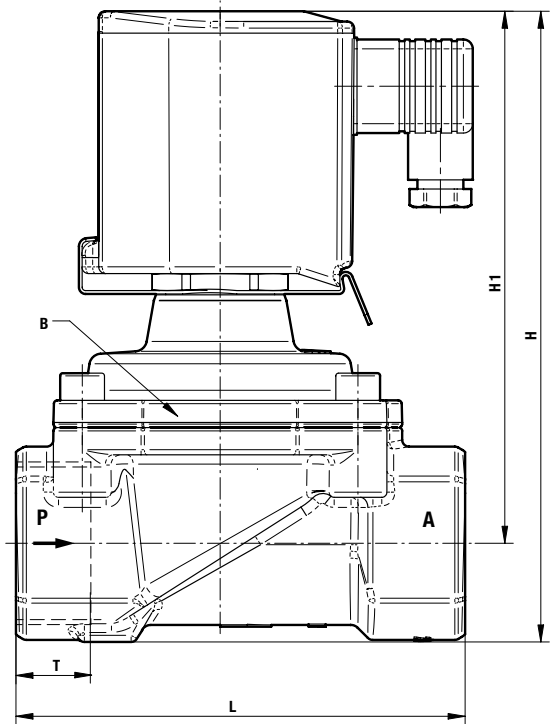
G 1 1/4 – G 2 with solenoid 940x (16 bar)  
 resp. 1 1/4 NPT – 2 NPT with solenoid 940x (16 bar)

### General Dimensions

Solenoid rotatable 360°  
 Socket turnable 4 x 90°  
 (socket included)

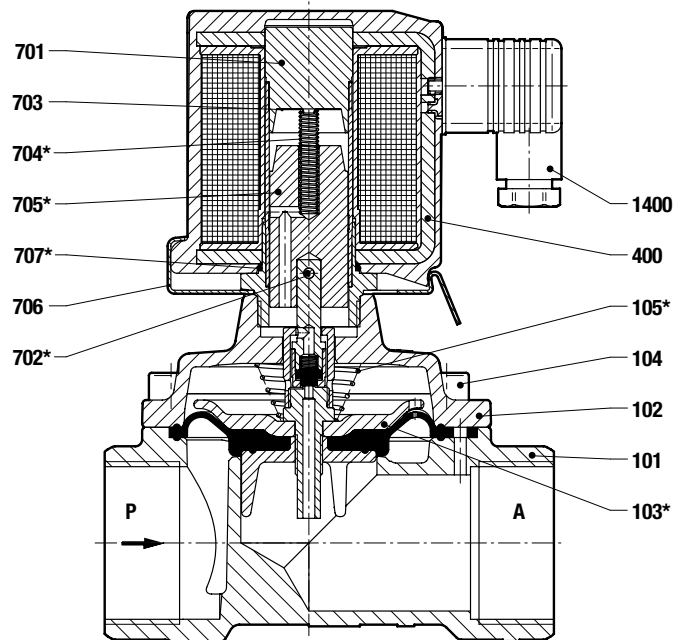
Part Number	Connection Size	L (mm)	H (mm)	H1 (mm)	B* (mm)	T (mm)
8254500.940x 8264500.940x	G 1 1/4 1 1/4 NPT	132	186	157	92	20.0 17.0
8254600.940x 8264600.940x	G 1 1/2 1 1/2 NPT	132	186	157	92	22.0 17.0
8254700.940x 8264700.940x	G 2 2 NPT	160	201	167	109	24.0 17.5

\* B = max. width



### Section View

- 101 Valve body
- 102 Valve cover
- \*103 Diaphragm
- 104 Allen head screw
- \*105 Pressure spring
- 400 Solenoid
- 701 Core tube
- \*702 O-ring
- 703 Round plate
- \*704 Pressure spring
- \*705 Plunger
- 706 Spring clip
- \*707 O-ring
- 1400 Electrical connector (included)



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